

[0030] <sup>2</sup> In the manufacturing process described above, the metal halide is absorbed by the porous body of the halogen-introduction carrier 25 in a roughly unimolecular layer. Therefore, by controlling the size of the halogen-introduction carrier 25, it is possible to regulate accurately the target amount of halogen introduced, even when the amount is very slight. Specifically, it is possible to absorb 1  $\mu\text{g}$  of bromine in a halogen-introduction carrier that comprises porous body of tungsten 1.1 mm in outside diameter, 2 mm in length and 19 mg in weight. Moreover, because the metal halide absorbed in the halogen-introduction carrier 25 is released by heating, an accurately regulated amount of halogen can be introduced into the space 27, which will become the discharge space, by introducing an halogen-introduction carrier 25 of controlled size into the auxiliary tube 23, heating it to release the halogen, and letting the halogen expand into the space 27.

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[0035] <sup>3</sup> During the manufacture of the halogen-introduction carrier, powdered tungsten with an average particle diameter of 5  $\mu\text{m}$  was prepared by mixing with 5 wt-% stearic acid as a binder and heating, then loaded into a mold with columnar mold spaces and compacted with a press to form molded pieces measuring 1.1 mm in outside diameter, 2 mm total length, and 20 mg in weight. The molded pieces thus obtained were heated under a hydrogen atmosphere to produce pre-sinters, and the pre-sinters were sintered in a vacuum to produce halogen-introduction carriers which were columnar porous bodies. A metal halide composed of mercury bromide ( $\text{HgBr}_2$ ) was adsorbed by multiple manufactured halogen-introduction carriers, by the method shown in Figure 4. When one of these halogen-introduction carriers 25 underwent quantitative measurement by means of ion chromatography, the adsorption of 1  $\mu\text{g}$  of bromine was confirmed.

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#### REMARKS

The requested amendments relate to obvious errors for the following reasons:

As indicated in several parts of the description and claims (paragraphs [0013], [0023], [0031], [0036] and claims 8 and 11), the amount of halogen in the discharge maps of the invention is between  $1.7 \times 10^4 \mu\text{mol}/\text{mm}^3$  and  $6.7 \times 10^4 \mu\text{mol}/\text{mm}^3$ , with the volume of the discharge space being at most  $80 \text{ mm}^3$ . Since bromine, which is the halogen specifically addressed in the present application and also generally most commonly used, has a molecular